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core!

rodents such as mice, rats, and guinea pigs, and the like. The term does not denote a particular age or sex. Thus, adults and post-natal (newborn) subjects, as well as fetuses, are intended to be covered.

In the Claims:

Please cancel claims 9, 21, 25, 26, 40, and 47.

Please add new claim 48 as follows:

48. A method according to claim 26, wherein recruitment is to the caudate nucleus, the putamen, or the globus pallidus.

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Please amend claims 1, 6, 13, 18, 28, 37, and 44 as follows:

1. (Amended) A method of inducing neuronal production in post-natal and adult brain comprising:

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providing a nucleic acid construct encoding a neurotrophic factor and

injecting the nucleic acid construct into a subject's lateral ventricles or ventricular wall zone under conditions effective to express the neurotrophic factor and to induce neuronal production in any one or all of the caudate nucleus, the putamen, and/or the globus pallidus of the subject.

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6. (Amended) A method according to claim 1, wherein the nucleic acid construct further comprises an inducible or conditional promoter for controlling expression of the neurotrophic factor.

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13. (Amended) A method of recruiting neurons to a subject's brain comprising:

providing a nucleic acid construct encoding a neurotrophic factor and

injecting the nucleic acid construct into the subject's lateral ventricles or ventricular wall zone under conditions effective to express the

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neurotrophic factor and to recruit neurons to any one or all of the caudate nucleus, the putamen, and/or the globus pallidus of the subject.

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18. (Amended) A method according to claim 13, wherein the nucleic acid construct further comprises an inducible or conditional promoter for controlling expression of the neurotrophic factor.

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28. (Amended) A method of treating a neurodegenerative condition comprising:

providing a nucleic acid construct encoding a neurotrophic factor and

injecting the nucleic acid construct into a subject's lateral ventricles or ventricular zone wall under conditions effective to treat a neurodegenerative condition.

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37. (Amended) A method according to claim 28, wherein the nucleic acid construct further comprises an inducible or conditional promoter for controlling expression of the neurotrophic factor.

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44. (Amended) A method of treating a neurodegenerative condition comprising:

providing a neurotrophic factor and

introducing the neurotrophic factor into any one or all of a subject's caudate nucleus, putamen, and/or globus pallidus under conditions effective to treat a neurodegenerative condition.